

## ABSTRACT

Yagi antenna is antenna that formed by director elements, exciter element, and reflector element. This final project's goal is to realize a prototype of Yagi antenna 2000MHz – 2500MHz in  $VSWR \leq 1,5$  ( $G \geq 8$  dBi). The design and realize generate of Yagi antenna with rectangular reflector  $90^\circ$  as a space, an cross electrical folded dipole exciter and six director that formed logarithmic designedly for widen bandwidth. Radiation pattern of this antenna is unidirectional.

Because impedance of transmission line (  $50\Omega$  ) with the impedance of the antenna mismatch, then in realization this antenna use matching impedance type transformation that made from copper wire coil on ferrit

To know performance of this antenna is needed a measurement mechanism. The measurement consist of VSWR measurement, bandwith, radiation pattern and antenna gain. From measurement result is got bandwith with  $VSWR = 1,5$  limits 481 MHz, radiation pattern is unidirectional and can get gain 10,92 dBi